

OPERATION GUIDE

80356

Slow-Release Leak
Test Tool
80356-9800
Rev A



POWERED BY ACOEM

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Met One Instruments, Inc. is now part of the Acoem international group of companies.

Met One Instruments has been designing and manufacturing class-leading meteorological, ambient air sensing, and air quality monitoring instrumentation since its inception in 1989. Its line of robust industrial-grade meteorological equipment, air particulate monitoring equipment, and indoor air quality monitoring systems have set the standard for the industry. Headquartered in Grants Pass, OR, Met One Instruments, Inc. is fueled by a dedicated expert team who is diligently working to advance the technology required to ensure continued improvements in human and environmental health now and for generations to come.

Acoem is committed to helping organizations and public authorities find the right balance between progress and preservation – safeguarding businesses and assets and maximizing opportunities while conserving the planet’s resources. Headquartered in Limonest, France, Acoem delivers unrivaled inter-operable AI-powered sensors and ecosystems that empower our customers to make enlightened decisions based on accurate and timely information.

In 2021, Acoem acquired Met One Instruments, marking a pivotal moment when two industry leaders in the air quality monitoring sectors converged – creating a single, stronger and more future-focused provider of holistic environmental monitoring solutions. Now, **Met One Instruments Powered by Acoem** has opened new possibilities through an extensive offering of class leading, multi-parameter environmental monitoring and industrial reliability solutions. These integrated measurement systems, technologies, and services deliver comprehensive solutions for a range of applications, including environmental research, regulatory compliance, and industrial safety and hygiene.

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1. PURPOSE AND DESCRIPTION

When a leak test is complete, vacuum created by the system needs to be released. If the vacuum is released rapidly, filter tape fragments can be drawn into the flow path, causing the measurement detection system to be blocked or contaminated. This can negatively affect the instrument's accuracy and function. The Slow-Release Leak Test Tool (**80356**) was designed to prevent this occurrence.

The Slow-Release Leak Test Tool utilizes an internal orifice to slowly release vacuum, following a leak test. This tool replaces leak check devices such as plugs and vinyl inlet caps.

The following instruments require the Slow-Release Leak Test Tool to complete a leak test:

- **BC 1054**
 - *Dilution Flow System (82480) requires the 3-inch tube, part 81885 to attach the Leak Test Tool to the inlet.*
- **BC 1060**
- **C-12**

2. INSTALLATION

Firmly press the black inlet receiver end of the tool (shown on the right) onto the instrument's inlet tube.

The photos below illustrate where to install the Slow-Release Leak Test Tool for each instrument listed in the Description section above.



Figure 2-1 Inlet Receiver

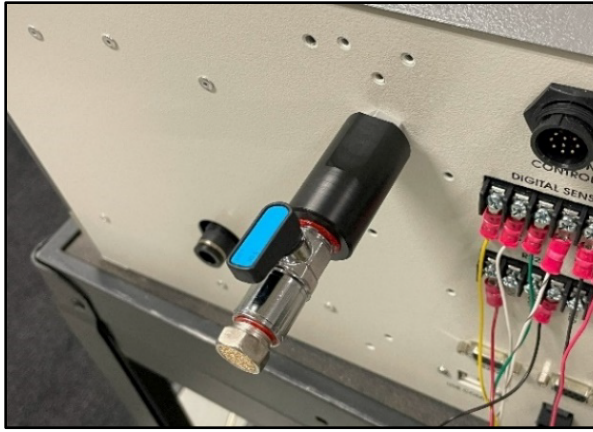


Figure 2-2 BC 1054 Inlet Location

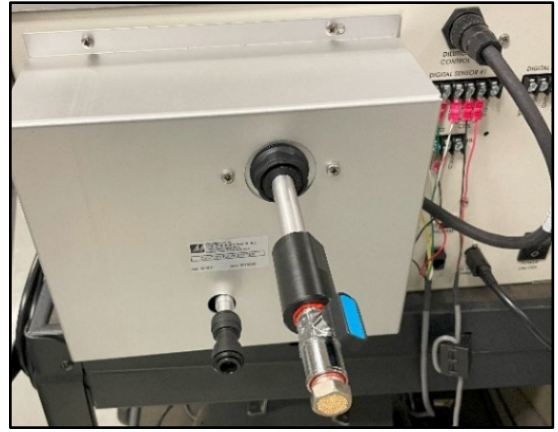


Figure 2-3 BC 1054 with Dilution System Inlet Location



Figure 2-4 BC 1060 Inlet Location



Figure 2-5 BC 1060 Inlet Location with Dilution Flow Adaptor



Figure 2-6 C-12 Inlet Location

3. SLOW-RELEASE LEAK TEST TOOL OPERATION

1. Install the Leak Test Tool by sliding the black inlet receiver onto the Instrument's inlet tube.
2. Turn the valve lever to the closed or OFF position.
3. Begin the leak test as per the instrument's leak test procedure found in the operation manual.
4. Follow the leak Test procedure for the specific instrument.
5. When the leak test is complete, open the leak test tool by turning the lever to the open position or ON position.

Allow at least 10 seconds for the pressure to stabilize before removing the Leak Test Tool.



Figure 3-1 Valve Closed



Figure 3-2 Valve Open

NOTE: Vacuum release times will vary based on the instrument type.